tively isolates the cognitive ability to be tested, even in aged or infirm users. Testing, scoring, and reporting of results, on screen or by optional printout on paper tape, are fully automatic, so that both monitors can be used for self-testing by the general public and for testing patients at home, as well as for testing by physicians, nurses or other professionals. Each monitor requires only a few moments and is easily repeated at any time by automatic generation of new random numbers. Other easily discriminated symbols, such as letters, can be used to test anyone who does not know numbers.

Now that that the preferred embodiments of the present invention have been shown and described, various modifications and improvements thereon will become readily apparent to those skilled in the art. Accordingly, the spirit and scope of the present invention is to be limited only by the appended claims, and not by the foregoing specification.

What is claimed is:

1. A memory monitor comprising:
(A) display means;
(B) means for entering data;
(C) means for randomly generating data and displaying said randomly generated data is a common format on said display means;
(D) means for testing the user's comprehension of said randomly generated data;
(E) means, operative only if the user comprehends said randomly generated data, for testing the immediate recall by the user of said randomly generated data; and
(F) means, operative only if the user has immediate recall of said randomly generated data, for testing the delayed recall by the user of said randomly generated data.

2. The memory monitor of claim 1 wherein said randomly generated data comprises a number comprising a series of digits.

3. The memory monitor of claim 2 wherein said display means displays said series of digits in the common format of a telephone number.

4. The memory monitor of claim 3 wherein said telephone number is a seven-digit number with punctuation intermediate the third and fourth digits.

5. The memory monitor of claim 3 wherein said telephone number is a ten-digit number in the common format of a long distance telephone number.

6. The memory monitor of claim 5 wherein the common format is

"— — — · — — — · — — — —"

or

"(— — —) — — — · — — — —".

7. The memory monitor of claim 2 wherein said data entry means comprises a plurality of numbered buttons.

8. The memory monitor of claim 1 wherein said means for testing comprehension of said randomly generated data comprises means for displaying said randomly generated data on said display means, and means for comparing said randomly generated data with first new data entered by the user on said data entry means while said randomly generated data is displayed on said display means and for displaying correct data in said first new data on said display means in alignment with said randomly generated data displayed.

9. The memory monitor of claim 8 additionally comprising means, operative only if an error was made, for clearing said display means of any of said data and then restarting said comprehension test means.

10. The memory monitor of claim 8 additionally comprising means, operative only if an error was made, for indicating an error was made on the last datum entered by the user on said data entry means and for providing the user another opportunity to enter the correct datum.

11. The memory monitor of claim 1 wherein said means for testing the immediate recall of said randomly generated data comprises means for clearing said display means of any of said data while displaying on said display means the common format of said randomly generated data; means for displaying on said display means second new data entered by the user on said data entry means; means for comparing said second new data entered by the user with said randomly generated data and drawing attention to any errors made by the user; and means, operative only if an error was made, for clearing said display means of said second new data and restarting said comprehension test means.

12. The memory monitor of claim 1 wherein said means for testing the delayed recall of said randomly generated data comprises means for clearing said display means of any of said data displayed; means for distracting the user; means for clearing said display means of any of said data displayed while displaying on said display means the common format of said randomly generated data; means for displaying on said display means third new data entered by the user on said data entry means; and means for comparing said third new data entered by the user with said randomly generated data.

13. The memory monitor of claim 12 wherein said delayed recall test means additionally comprises means, operative only if an error was made, for restarting said comprehension testing means.

14. The memory monitor of claim 12 wherein said means for distracting the user comprises means for requiring the user to correctly copy a series of simple data sets.

15. The memory monitor of claim 12 additionally including means for calculating and displaying on said display means a score reflecting the user's performance on the delayed recall testing means.

16. The memory monitor of claim 15 wherein said calculating means divides the number of digits correctly entered by the user as said third new data on said delayed recall test by the total number of digits in said randomly generated number.

17. The memory monitor of claim 1 additionally including means for calculating and displaying on said display means a score reflecting the user's performance on the delayed recall testing means.

18. The memory monitor of claim 1 additionally including means for calculating and displaying on said display means scores reflecting the user's performance on the comprehension testing means, the immediate recall testing means and the delayed recall testing means, separately, each of said scores representing the number of data units correctly entered during each test as a percentage of the total number of data units in the randomly generated data times the number of tests.

19. The memory monitor of claim 1 additionally including means for calculating scores reflecting both the number of new data units copied or recalled on each